



Wausau School District

Facility Assessment

February 2025





Prepared by:



CESA 10 Facilities Management

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• • • History • • •

Established in Wisconsin in 1964, Cooperative Educational Service Agencies (CESAs) have a long history of partnering with school districts. CESA 10 Facilities Management Department is a nonprofit educational service agency providing facilities management services to local government and school district customers throughout the state of Wisconsin.

With decades of experience and expertise in managing institutional facility needs, CESA 10 has a unique position as a nonprofit educational service agency. This unique position helps to ensure customers benefit from our trusted and unbiased judgment and experience gained through the execution of hundreds of investment grade audits, school energy efficiency, construction, renovation and environmental projects, and other facilities services.

CESA 10 assists public entities in managing their facility needs in health, safety, energy efficiency, referendum and long-term planning, and construction management.

The department's main areas of concentration are:

- Investment Grade Audits, including Long-Term Comprehensive Plans
- Referendum Planning
- Construction Management
- Owner's Representative
- Environmental Health and Safety Consulting
- Environmental Project Consulting and Management





• • • Executive Summary • • •

At the request of the Wausau School District, CESA 10 technical experts performed a detailed on-site audit of its facilities. This audit provides the District with a comprehensive facilities maintenance and capital project plan, with identified problems, proposed solutions, and estimated costs. The recommendations in this report aim to improve failing and inefficient equipment, systems, and facilities and reduce energy consumption to ensure any taxpayer investment is managed within an appropriate payback period.

According to the 2021 State of our Schools report, public school districts in the U.S. only spend an average of \$56 billion on their facilities' maintenance and operations annually. That's \$27.6 billion short of what is recommended to maintain, operate, and renew facilities to provide healthy and safe 21-century learning environments for all children. Local districts know their available funding options often fall short of maintenance wants and needs. Therefore, it is imperative to engage in proper facilities planning.

Planning should include:

- Having an up-to-date master facilities plan
- Preparing annual District-wide maintenance, repair, and energy management plans
- Defining and disseminating benchmarks for facilities planning
- Analyzing existing and potential technical assistance and tools, environmental health and safety hazards, and ADA-compliance issues
- Establishing a District facilities planning designee or committee

Numerous priority improvement measures have been identified for consideration. Preventative measures are recommended to provide more consistent quality for the ever-aging facilities. These recommendations include documented seasonal inspections, robust preventative maintenance, expeditious corrective actions, and minor and major projects.

It is important to note the prices listed in the strategic plan are only for construction costs. There are additional costs related to construction management, architect/engineer fees, contingencies, permits, plans, and other material costs. Additionally, prices can fluctuate based on the types of materials chosen, the time of year construction occurs, and final project scopes.

The District has effectively utilized the existing buildings and equipment to the best of its available resources. The District can use this report to identify the highest priority facility improvement measures (FIMS) during corrective maintenance, minor project implementation, and capital planning. The recommendations included in this report are meant to help the District maximize capital investment impact, advance the learning environment, conserve energy, reduce operating and maintenance costs, improve occupant comfort, and increase safety and security where applicable.

According to a Preventative Maintenance Report by Dude Solutions, **schools performing regular preventative maintenance saw a 50-65% reduction in the rate of emergency work.** Additionally, their studies showed **a solid preventative maintenance plan for roofing can generate a 30% extension of the life of the roof.**



Wausau Strategic Plan



Wausau - Facilities Improvement Budget

Deferred Maintenance

Campus	1-2 Year	3-5 Year	5-10 Year	1-10 Year Total Estimates**
Horace Mann Middle School	\$407,000	\$1,436,000	\$1,857,500	\$3,700,500
John Muir Middle School	\$266,500	\$1,725,000	\$1,515,000	\$3,506,500
Longfellow Administration	\$495,800	\$1,655,000	\$257,500	\$2,408,300
East High School	\$2,514,000	\$3,031,500	\$3,628,000	\$9,173,500
West High School	\$1,291,500	\$2,775,000	\$6,395,999	\$10,461,500
Total	\$4,974,800	\$10,622,500	\$13,653,000	\$29,250,300

** Construction Costs = Hard construction costs only (labor, materials, and equipment)

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Conducted for the Wausau School District

Conducted on

February 2025

School District Personnel

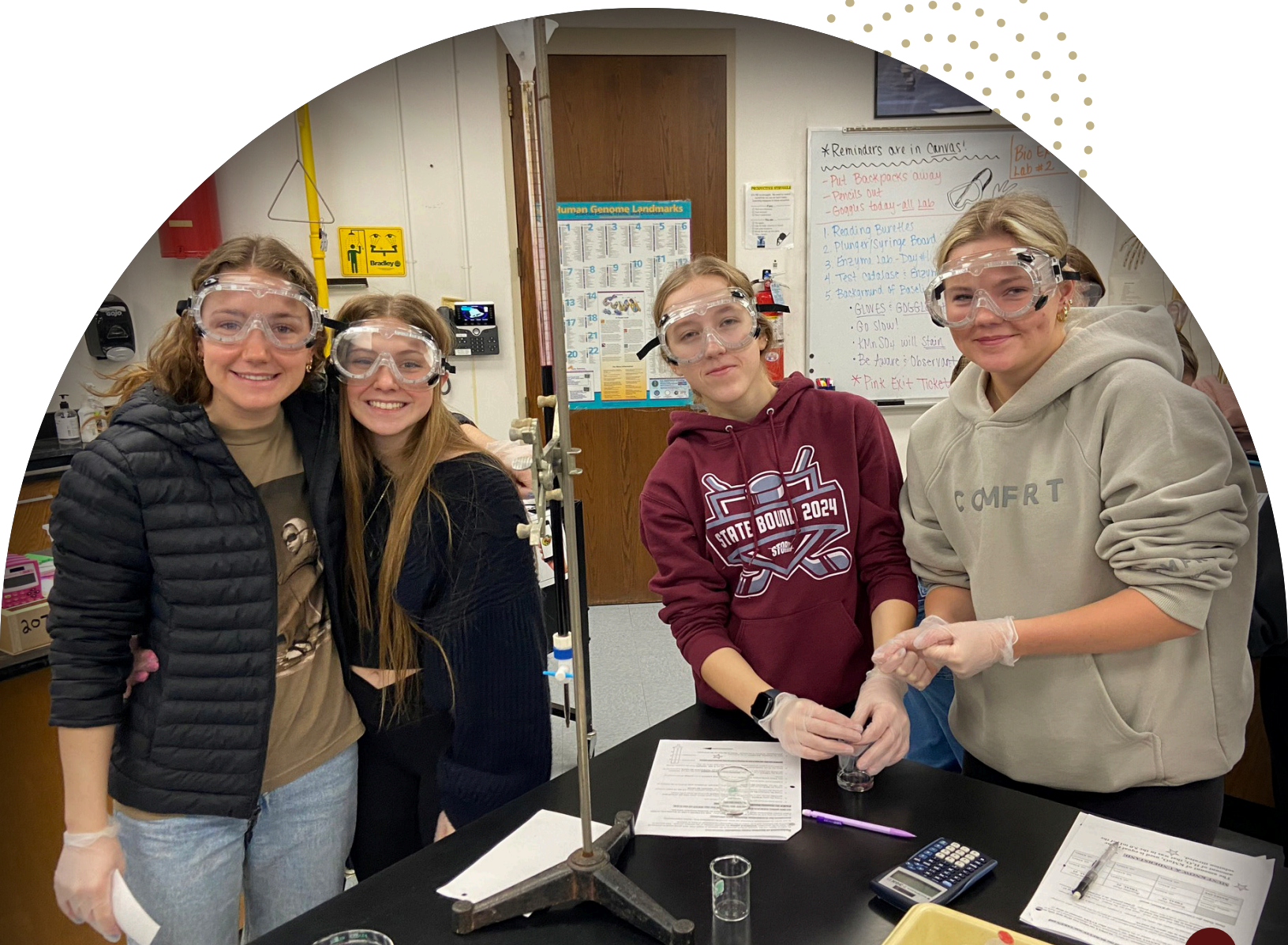
Cale Bushman • Superintendent

Prepared by

CESA 10 Facilities Consultants

Nate Curell • Project Manager

John Berget • Project Manager





C.E.S.A.10
Facilities Management Services

Facility Improvement Measures

Wausau - Horace Mann MS

Building System	General Description	Recommendation	Cost Estimate
Exterior Building - Roofing	Roof sections A-G and I, totaling 66,500 sq. ft., are all roughly 22 years old and out of warranty. All of the M section roofs, covering former standing seam metal roof, are also 22 years old and out of warranty. Inspect these M roofs thoroughly in attempt to extend life given a strong underlying roof. Roof sections H, J, & K come out of warranty in 2025, however should have roughly 5-10 years of life remaining. From Google Earth historical imagery, it did not appear that all M roofs are of the same vintage, as roofing reports state.	Replace sections A-G and I in 3-5 years, expect to replace sections H, J, K, and the M roofs in 5-10 years.	\$1,900,000
Exterior Building - EIFS	The school is experiencing ongoing problematic leaking in the gym roof/EIFS wall area. Concrete panels by pool entrance doorways leaking. These issues have been difficult to solve and has been bringing water into the building for years.	Complete upper EIFS demo/reflash/reconstruction. Extend or modify scupper to prevent staining. Professionally clean face brick.	\$250,000
Electrical - Breakers	The large Square D Model 5 motor control center in the second floor mechanical room is obsolete. Parts may be difficult to obtain on the used market.	Replace the obsolete breaker panel with modern equipment in the next 5-10 years.	\$75,000
Electrical - Pool Lighting	Pool lighting position above pool edge restricts ease of access. Ongoing issue per staff interviews.	Relocate and update lighting to provide safer accessibility.	\$28,000



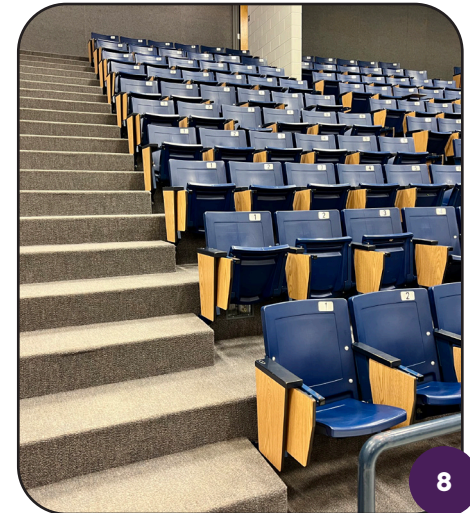


C.E.S.A. 10
 Facilities Management Services

Facility Improvement Measures

Wausau - Horace Mann MS

Building System	General Description	Recommendation	Cost Estimate
Mechanical - Shop Dust Collection	The Tech-Ed dust collection system is functional but original, making it 32 years old, past its expected life. A new system will be more reliable and energy efficient.	Replace and upgrade the dust collection system in the next 1-5 years.	\$125,000
Site & Landscape	Multiple concrete walk slabs with transitional and divided cracks.	Replace cracked concrete walk slabs.	\$40,000
Interior -Gym Ceiling	Acoustical ceiling pads in the gym are coming down in some areas likely due to area water infiltration.	Although the condition of the ceiling blankets could not be determined from the ground. It is likely that these just need to be retaped/resecured after the water leaks are addressed.	\$10,000
Interior - Large Group	The large group room seating and flooring is showing its age. Carpet is wearing, showing through to backing in some areas. Seating is worn and uncomfortable.	In order to replace the carpeting, the seating must be removed. Seating is worn but functional. Determine if the district would like to refurbish and reinstall or purchase new seating. A band-aid fix would be to replace the worn stair sections with a rubber tread material. Pricing given for full replacement of flooring and seating.	\$150,000



Horace Mann MS Strategic Plan

Wausau - Horace Mann MS

Project	Estimated Cost
1-2 Year Needs	
Exterior - EIFS Demo/Reflash/Reconstruction	\$250,000
Interior - IMC Masonry	\$20,000
Electrical - Door Access	\$16,000
Electrical - Cameras	\$15,000
Mechanical - Domestic Hot Water	\$15,000
Mechanical - Air Distribution	\$15,000
Interior - Wood Doors	\$10,000
Mechanical - Pool Pumps	\$10,000
Site & Landscape - Traffic Flow	\$7,500
Interior - Locker Locks	\$6,500
Site & Landscape - Asphalt Maintenance	\$5,500
Interior - Gym Flooring	\$5,000
Interior - Replace Carpeting	\$5,000
Mechanical - Pipe Insulation	\$5,000
Site & Landscape - Cracked Concrete Walk Slabs	\$5,000
Site & Landscape - Planter Maintenance	\$5,000
Exterior - Steel Doors	\$5,000
Interior - Floor Joints	\$3,000
Interior - Cafetorium Structural	\$2,500
Interior - Elevator Carpet Tiles	\$1,000
1-2 Year Total	\$407,000
3-5 Year Needs	
Exterior - Roof Sections A-G	\$800,000
Interior - Women's Restrooms	\$175,000



Horace Mann MS Strategic Plan

Wausau - Horace Mann MS

Project	Estimated Cost
Mechanical - Shop Dust Collection	\$125,000
Site & Landscape - Track	\$50,000
Site & Landscape - Light Pole Bases	\$40,000
Interior - Bathroom Partitions	\$35,000
Electrical - Pool Lighting	\$28,000
Mechanical - Cafetorium Destrat Fans	\$25,000
Exterior - Tuck Pointing	\$20,000
Site & Landscape - Planter Maintenance	\$15,000
Site & Landscape - Add Electrical to Outdoor Storage	\$15,000
Exterior - Structural Street Columns	\$15,000
Site & Landscape - Asphalt Maintenance	\$11,000
Site & Landscape - Cracked Concrete Walk Slabs	\$10,000
Exterior - Steel Doors	\$10,000
Interior - Wood Doors	\$10,000
Interior - Replace Carpeting	\$10,000
Mechanical - Pool Pumps	\$10,000
Interior - Gym Ceiling	\$10,000
Interior - Stairs	\$8,500
Exterior - Automatic Door Opener at Door #13	\$8,500
Interior - Gym Flooring	\$5,000
3-5 Year Total	\$1,436,000
5-10 Year Needs	
Exterior - Roof Sections H,J,KM	\$1,100,000
Interior - Large Group Room	\$150,000
Interior - Sports Lockers	\$125,000



Horace Mann MS Strategic Plan

Wausau - Horace Mann MS

Project	Estimated Cost
Interior - Pool Deck & Equipment	\$100,000
Electrical - Breakers	\$75,000
Interior - Ceiling Tile	\$75,000
Interior - Gym Flooring	\$40,000
Interior - Bathroom Partitions	\$35,000
Site & Landscape - Planter Maintenance	\$25,000
Site & Landscape - Asphalt Maintenance	\$25,000
Site & Landscape - Cracked Concrete Walk Slabs	\$25,000
Exterior - Steel Doors	\$20,000
Interior - Wood Doors	\$15,000
Interior - Replace Carpeting	\$15,000
Mechanical - Office AHU	\$15,000
Mechanical - Backup Pool Boiler	\$10,000
Mechanical - Domestic Hot Water	\$7,500
5-10 Year Total	\$1,857,500
Horace Mann 10-Year Strategic Plan Total	\$3,700,500



C.E.S.A.10
Facilities Management Services

Facility Improvement Measures

Wausau - John Muir MS

Building System	General Description	Recommendation	Cost Estimate
Interior - Pool Deck Structural	The underdeck tunnel area surrounding the pool is degrading. In certain areas, concrete reinforcement is severely rusting and has popped concrete out of the structure.	Work with a structural engineer to identify if there is any immediate risk and put forth a repair plan. This will likely include chipping away loose concrete, grinding, painting rebar, and reapplying new concrete. The longer this repair is deferred, the worse the situation will get.	\$50,000
Interior - Pool Deck and Equipment	The pool deck tile has locations of past spot replacement and some tile grout is missing. Stainless steel rails, pool start stations, and judge station are rusting.	The pool deck will likely need attention in the next 3-7 years. At this time determine if the district would like to redeck the entire pool area or continue with spot replacement. Replace or refurbish pool equipment in conjunction with a deck project.	\$175,000
Site & Landscape	Site concrete sidewalks in poor condition.	Replace surrounding concrete sidewalk as needed.	\$50,000
Electrical - Surge Protection	Loss of phase and power surges have become an issue in John Muir.	The district is currently working with an electrical engineering company to rectify these issues across the district. Our recommendation is to prioritize the individual issues at the various sites and compare project costs from multiple vendors.	\$35,000





C.E.S.A. 10

Facilities Management Services

Facility Improvement Measures

Wausau - John Muir MS

Building System	General Description	Recommendation	Cost Estimate
Exterior Building Roofing	Roof sections X-Y are 21-23 years old and out of warranty. These roofs should be replaced in the next 2-5 years. Various other sections (A-F) begin to come out of warranty in 2025-2027, however should have life left until roughly 2030-35.	Replace roof sections X and Y in the next 3-5 years. Expect to start seeing issues in roof sections A-F in 7-10 years.	\$825,000
Interior - Gym Flooring	The main gym floor is scuffed, scratched, and overdue for refinishing.	Sand, paint, and refinish gym floor in next 1-2 years. Maintain a wood floor refinishing cycle, recommended every 5-10 years dependent on use and condition.	\$35,000
Mechanical - Air Handling	E1 AHU/DX system has frequently been problematic. Additionally, ongoing mechanical maintenance due to system complexity.	Replace the E1 AHU/DX unit in the next 3-5 years. Air handling mechanical equipment in this school is in fair condition overall. Several units have had sections mothballed due to past failures. Given the age of the equipment, it is recommended to continue to maintain due to the high cost of replacement. Mechanical maintenance costs at Muir will be higher compared to average schools.	\$675,000
Site & Landscape	Southeast parking lot is in failing condition.	Hire a civil firm to design a rework and resurface the lot. Ensure stormwater utilities are properly in place.	\$350,000





John Muir MS Strategic Plan

Wausau - John Muir MS

Project	Estimated Cost
1-2 Year Needs	
Interior - Pool Deck Structural	\$50,000
Interior - Gym Flooring	\$35,000
Electrical - Door Access	\$34,000
Mechanical - Air Handling	\$25,000
Electrical - Cameras	\$15,000
Interior - Ceramic Tile	\$15,000
Interior - Wood Doors	\$15,000
Interior - Pool Size	\$15,000
Site & Landscape - Traffic Study	\$15,000
Interior - VCT Flooring	\$15,000
Mechanical - Pipe Insulation	\$10,000
Site & Landscape - Water Intrusion Issues	\$10,000
Mechanical - Domestic Hot water	\$7,500
Interior - Pool Stairwell	\$5,000
1-2 Year Total	\$266,500
3-5 Year Needs	
Mechanical - Air Handling	\$450,000
Site & Landscape - Southeast Parking Lot	\$350,000
Exterior - Roofing Sections X-Y	\$200,000
Site & Landscape - Parking Space	\$160,000
Interior - Staff Restrooms	\$120,000
Interior - Consumer Services	\$75,000
Site & Landscape - Add Sidewalks	\$65,000
Site & Landscape - Replace Sidewalks	\$50,000



John Muir MS Strategic Plan

Wausau - John Muir MS

Project	Estimated Cost
Electrical - Surge Protection	\$35,000
Interior - Bathroom Partitions	\$35,000
Mechanical - Pool Heat Exchanger	\$35,000
Site & Landscape - Water Intrusion Issues	\$25,000
Site & Landscape - Outdoor Storage Space	\$20,000
Interior - VCT Flooring	\$20,000
Interior - Wood Doors	\$17,500
Interior - Stairs	\$15,000
Mechanical - Domestic Hot Water	\$7,500
Interior - Elevator	\$5,000
3-5 Year Total	\$1,725,00
5-10 Year Needs	
Exterior - Roof Sections A-F	\$625,000
Mechanical - Air Handling	\$200,000
Interior - Pool Deck and Equipment	\$175,000
Exterior - Building Windows	\$160,000
Interior - VCT Flooring	\$150,000
Interior - Science FF&E	\$150,000
Interior - Bathroom Partitions	\$35,000
Interior - Wood Doors	\$20,000
5-10 Year Total	\$1,515,000
John Muir 10-Year Strategic Plan Total	\$3,506,500



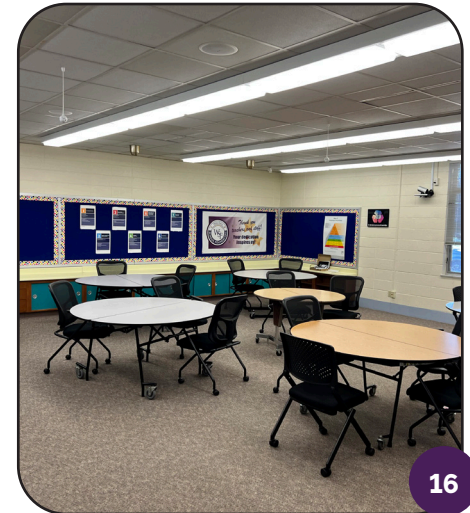
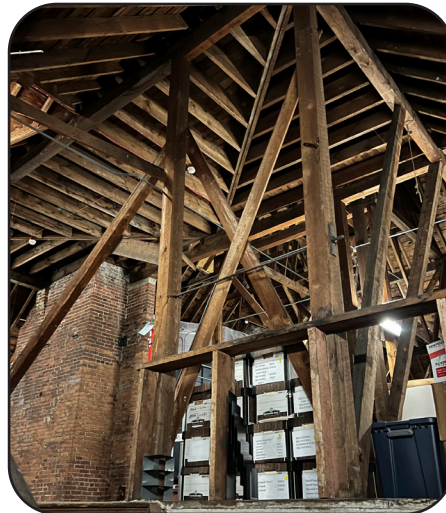
C.E.S.A. 10

Facilities Management Services

Facility Improvement Measures

Wausau - Longfellow Admin

Building System	General Description	Recommendation	Cost Estimate
Electrical - Annex Main	The main electrical equipment feeding the annex is original 1963 and well beyond it's expected life. The equipment is obsolete and parts will be very difficult to find if needed. The electrical room is being used as janitorial storage.	Replace all the annex electrical main gear. Keep code clearance in front of electrical panels.	\$75,000
Interior - Fire Hazard	The original 1894 structure is composed of an open truss, wood-framed attic. The space is used for paper and materials storage, and HVAC. It is not sprinkled but does have smoke detection.	Install a dry sprinkler system into the attic space.	\$80,000
Site & Landscape	Front walk in poor condition. Concrete is in need of maintenance.	Replace cracked concrete walk slabs. Grind or level uneven slabs.	\$45,000
Electrical - Whole Building Lighting Upgrade	The facility is in need of a whole building lighting upgrade from fluorescent to LED. Interior lighting projects typically provide a 6 year simple payback, along with giving building occupants the ability to adjust light levels to their liking. Additionally, the systems have a 20+ year lifespan, drastically reducing maintenance required to change lamps and ballasts.	Perform a whole building lighting conversion to LED fixtures including occupancy sensors in appropriate spaces, and dimming control. Before moving forward, ensure it is the district's intention to stay in this facility for 5+ years to break even on the investment.	\$60,000





C.E.S.A. 10
Facilities Management Services

Facility Improvement Measures

Wausau - Longfellow Admin

Building System	General Description	Recommendation	Cost Estimate
Exterior - Soffit/ Facia	Large icicles around roof edges of the original and 1990 additions causing ice dams and heavy ice edge build up. Anticipate moisture infiltration during warmer seasons.	Air seal around perimeter of attic areas. Add underlayment ice and water shields to lower roof sections as part of roof replacement. Consider installing ice melt system if problems persists.	\$65,000
Interior - ADA	ADA access does not transition between the Annex and original building. Wheelchair access is not provided between the two buildings.	Install an accessibility lift between the two facilities.	\$75,000
Mechanical - HVAC Renovation	The Longfellow facility has multiple HVAC issues, some spelled out individually. This FIM identifies a full mechanical renovation at the facility replacing air handlers and piping. The facility uses a single-pipe system, heating and cooling water is run within the same pipe, making temperature control impossible at times in spring/fall. The air handler of the annex is plugged and no longer operating, not allowing code minimum fresh air to the space. All AHU's have been modified and are past their expected useful life.	Perform a full air & water piping HVAC renovation to the facility, installing both hot and chilled water piping. This FIM does not include boiler and chiller replacement identified elsewhere. If this entire project is not performed, replacing AHU-1 in the annex is high priority. (est. \$125,000) Perform this FIM at the same time as boiler/chiller replacement.	\$950,000
Exterior - Soffit/ Facia	Painted metal soffit and fascia around 1963 addition chipped and peeling.	Prepare and paint soffits and fascia. Consider cladding in aluminum to improve appearance and extend durability.	\$35,000



Longfellow Administration Strategic Plan

Wausau - Longfellow Administration

Project	Estimated Cost
1-2 Year Needs	
Exterior - Roofing Replacement	\$175,000
Electrical - Fire Alarm	\$90,000
Mechanical - Chiller	\$75,000
Exterior - Soffit/Facia Icicles	\$65,000
Site & Landscape - Cracked Concrete Walk Slabs	\$35,000
Electrical - Door Access	\$26,000
Interior - Replace Carpeting & Tile	\$10,000
Interior - Facade	\$5,000
Mechanical - Domestic Hot Water	\$5,000
Site & Landscape - Asphalt Maintenance	\$4,800
Interior - Annex Connector Block	\$2,500
Site & Landscape - Outdoor Shed Paint	\$2,500
1-2 Year Total	\$495,800
3-5 Year Needs	
Mechanical - HVAC Renovation	\$950,000
Mechanical - Boilers	\$125,000
Interior - Elevator	\$100,000
Electrical - Annex Main	\$75,000
Interior - ADA	\$75,000
Electrical - Bell/PA/Clock Mass Communication	\$70,000
Electrical - Whole Building Lighting Upgrade	\$60,000
Exterior - Tuckpointing	\$55,000
Interior - Replace Carpeting & Tile	\$35,000
Mechanical - Boiler Pumps	\$35,000

Longfellow Administration Strategic Plan

Wausau - Longfellow Administration

Project	Estimated Cost
Exterior - Soffit/Facia	\$35,000
Electrical - Cameras	\$10,000
Interior - Ceiling Tile	\$10,000
Electrical - Exterior Lighting	\$7,500
Site & Landscape - Cracked Concrete Walk Slabs	\$5,000
Interior - Facade	\$5,000
Site & Landscape - Unsecure Meter & Piping Access	\$2,500
3-5 Year Total	\$1,655,000
5-10 Year Needs	
Interior - Facade	\$100,000
Interior - Fire Hazard	\$80,000
Electrical - Exterior Transformer	\$30,000
Interior - Annex Connector Block	\$25,000
Interior - Replace Carpet and Tile	\$10,000
Mechanical - Domestic Hot Water	\$7,500
Site & Landscape - Cracked Concrete Walk Slabs	\$5,000
5-10 Year Total	\$257,500
Longfellow Administration 10-Year Strategic Plan Total	\$2,408,300



C.E.S.A.10

Facilities Management Services

Facility Improvement Measures

Wausau - East HS

Building System	General Description	Recommendation	Cost Estimate
Exterior Building	Light colored EIFS above exterior door entrances and large storefront windows are darkly stained.	Clean above areas. Seal and caulk openings. Prepare and paint to remove and cover stains.	\$21,000
Electrical - Exterior Pole Base Lighting	Due to freeze/thaw and drainage issues in the main parking lot (addressed in separate FIM), the parking lot lights are heaving and wiring breaks are occurring.	Replace damaged pedestals and rewire during parking lot project. Include electrical in parking lot design.	\$400,000
Interior - Ceramic Flooring	Areas of the school are seeing extensive failure of grout lines between ceramic tile.	RegROUT entire sections of areas with widespread failed grout.	\$65,000
Interior - Bleachers	East's bleachers are constructed of a plastic material easily damaged by balls. Also, frequent issues occur when pulling out the bleachers with electric motors not pulling in unison, binding the bleachers on their way out.	Install protective bleacher netting. Have the manufacturer go through the motor and pulley system to extend the life of the bleachers. Budget to replace damaged plastic bleacher rows.	\$45,000





C.E.S.A.10

Facilities Management Services

Facility Improvement Measures

Wausau - East HS

Building System	General Description	Recommendation	Cost Estimate
Mechanical - Air Handling	Ongoing mechanical maintenance due to system complexity.	Air handling mechanical equipment in this school is in fair condition overall. Several units have had sections mothballed due to past failures. Given the age of the equipment, it is recommended to continue to maintain due to the high cost of replacement. Recent cooling issues demand frequent follow up until resolved. Mechanical maintenance costs at East will be higher compared to average schools.	\$300,000
Mechanical - Domestic Hot Water	Of the five units reviewed during the audit, two were recently installed, one is 12 years old, and the remaining two are 23 years old - well past their expected life.	Expect to replace two water heaters within the next 1-2 years, and one within 3-5 years.	\$22,500
Site & Landscape	The tennis court area is failing. Cracked surfaces due to poor subbase drainage is occurring.	Hire a civil engineer to design a new court surface system with proper subbase drainage. Excavate and replace the courts entirely.	\$600,000
Mechanical-Boilers	Aside from the 2016 addition boiler, all 8 remaining boilers in the facility are 21 years old and approaching their end of life.	Expect to replace all eight original boilers in 5-10 years.	\$700,000





East HS Strategic Plan

Wausau - East HS

Project	Estimated Cost
1-2 Year Needs	
Exterior - Roof Sections A-T	\$1,450,000
Electrical - PA/Bell/Clock System	\$600,000
Site & Landscape - Parking Lots	\$200,000
Electrical - Door Access	\$62,000
Electrical - Front Sign	\$40,000
Interior - Ceramic Flooring	\$30,000
Interior - Bleachers	\$30,000
Electrical - Cameras	\$18,000
Mechanical - Domestic Hot Water	\$15,000
Site & Landscape - Dock	\$8,500
Site & Landscape - Unsecure Gas Valve & Meter	\$6,500
Site & Landscape - Asphalt Maintenance	\$5,500
Interior - Gym Flooring	\$5,000
Interior - Wood Doors	\$15,000
Interior - VCT Tile	\$5,000
Interior - Kitchen Operations	\$5,000
Mechanical - Pipe Insulation	\$5,000
Site & Landscape - Planter Maintenance	\$5,000
Exterior - Storefront Doors	\$5,000
Site & Landscape - Mulch	\$3,500
1-2 Year Total	\$2,514,000
3-5 Year Needs	
Exterior - Roof Sections A-T	\$1,450,000
Site & Landscape - Tennis Courts	\$600,000

East HS Strategic Plan

Wausau - East HS	
Project	Estimated Cost
Site & Landscape - Parking Lots	\$350,000
Electrical - Exterior Pole Base Lighting	\$200,000
Mechanical - Air Handling	\$150,000
Interior - Gym Flooring	\$55,000
Mechanical - Gym Destrat Fans	\$35,000
Exterior - Windows	\$30,000
Site & Landscape - Concrete Walk Slabs	\$28,000
Exterior - Clean EIFS	\$21,000
Exterior - Steel Doors	\$20,000
Interior - Kitchen Operations	\$15,000
Exterior - Caulk & Sealant	\$15,000
Interior - Ceramic Flooring	\$10,000
Interior - Wood Doors	\$20,000
Interior - Ceiling Tile	\$10,000
Mechanical - Domestic Hot Water	\$7,500
Interior - Bleachers	\$5,000
Interior - VCT Tile	\$5,000
Mechanical - Pipe Insulation	\$5,000
3-5 Year Total	\$3,031,500
5-10 Year Needs	
Site & Landscape - Turf Surfaces	\$1,800,000
Mechanical - Boilers	\$700,000
Site & Landscape - Parking Lots	\$500,000
Electrical - Exterior Pole Base Lighting	\$200,000
Mechanical - Air Handling	\$150,000



East HS Strategic Plan

Wausau - East HS	
Project	Estimated Cost
Interior - Gym Flooring	75,000
Exterior - Tuckpointing & Masonry Repairs	\$65,000
Mechanical - Boiler Pumps	\$40,000
Interior - Ceramic Flooring	\$25,000
Exterior - Window Sills	\$18,000
Interior - Wood Doors	\$25,000
Interior - Bleachers	\$10,000
Interior - VCT Tile	\$10,000
Mechanical - Shop Air Compressor	\$10,000
5-10 Year Total	\$3,628,000
East High School 10-Year Strategic Plan Total	\$9,173,500



C.E.S.A.10
Facilities Management Services

Facility Improvement Measures

Wausau - West HS

Building System	General Description	Recommendation	Cost Estimate
Electrical - Main Service	One of the main 3000A electrical services is of 1960's vintage, well beyond it's expected life, and obsolete for manufacturer support. Replacement parts will be difficult to find and expensive on the used market.	Replace the old 3000A main and its entire network of same vintage large breakers.	\$200,000
Interior - Stairwell Flooring	Terrazzo stairwells throughout the facility are in poor condition with many having major failures.	Prep the surfaces and install rubber tread. Address handrail issues.	\$240,000
Interior - Science Life Safety	Second floor science consists of a conglomerate of pods with the interior large science storage area being landlocked with no corridor space. This space appeared to have no emergency lighting and be under served with fire protection equipment.	Install 24-hour egress lighting in science storage and the surrounding four vestibules. Review smoke detection and alarm/strobes with a fire protection specialist. Be aggressive with monitoring and alarm given the space usage.	\$12,500
Mechanical - HVAC & Chilled Water	One of the two main water cooled chilling plants has a failed condenser bundle - a costly repair. The chilled water plant is water cooled. This cooling tower is also in need of repair and a high maintenance item. Several complex large AHU's (namely 1, 2, & 15) have been frequently problematic with portions of their components shutdown and frequently plugging air streams.	Hire a mechanical design firm to create a long term HVAC plan for the school. Evaluate the pros/cons of abandoning water cooled chilled water with ice storage vs. air cooled chilled water. Consider replacements of AHU's 1, 2, & 15 to conventional dual-coiled VAV w/reheat units. Complete an in depth mechanical strategic plan prior to replacements to ensure conformity to long term plan. Pricing given for systematic replacement of higher priority issues. Budgeting provided assumes: chiller maintenance years 1-2, chiller plant and AHU15 replacement years 3-5, AHU's 1 & 2 area full mechanical replacement in years 5-10. Large scale AHU's 1&2 replacement should coincide with needed renovations to second floor science interior.	\$4,150,000





C.E.S.A. 10
 Facilities Management Services

Facility Improvement Measures

Wausau - West HS

Building System	General Description	Recommendation	Cost Estimate
Electrical - Exterior Lighting	Exterior fiberglass light poles degrading and issues with control operation. School district owns the poles and WPS owns the light fixtures.	Replace district owned poles and repair or upgrade controls. Request WPS replace and upgrade fixtures as part of the pole replacement.	\$80,000
Exterior - Tuckpointing	Tuck pointing and masonry repairs needed. Stained face brick with open, missing, and deteriorating mortar.	Re-tuck walls, replace missing and damaged masonry, and professionally clean stone and bricks.	\$45,000
Site & Landscape	Set routine asphalt maintenance schedule with area rotation.	Continue to crack clean and crack fill as needed. Every 3-5 years seal, and repaint asphalt.	\$5,500
Exterior - Windows	Three large corridor windows on second floor are single-pane non-tempered windows. These windows are both inefficient and dangerous.	Replace the large single pane sections with double-pane thermally-broken tempered glass aluminum windows.	\$50,000





West HS Strategic Plan

Wausau - West HS

Project	Estimated Cost
1-2 Year Needs	
Exterior - Roof Sections A	\$315,000
Interior - Stairwell Flooring	\$180,000
Mechanical - HVAC & Chilled Water	\$150,000
Site & Landscape - Outdoor Scoreboards	\$120,000
Electrical - Door Access	\$50,000
Interior - Ceilings	\$50,000
Interior - Doors	\$50,000
Interior - Flooring	\$50,000
Exterior - Windows	\$50,000
Interior - Bathrooms	\$40,000
Interior - Bleachers	\$40,000
Electrical - Subpanels	\$25,000
Mechanical - Air Handling	\$25,000
Site & Landscape - Flooding Issue Near Door 37	\$20,000
Electrical - Cameras	\$15,000
Greenhouse	\$15,000
Interior - Science Life Safety	\$12,500
Interior - Painting	\$10,000
Interior - Life Safety Storage Clutter	\$10,000
Mechanical - Controls	\$10,000
Mechanical - Pipe Insulation	\$10,000
Site & Landscape - Asphalt Maintenance	\$5,500
Plumbing - Domestic Hot Water	\$5,000
Site & Landscape - Planter Maintenance	\$5,000



West HS Strategic Plan

Wausau - West HS

Project	Estimated Cost
Exterior - Windows	\$5,000
Site & Landscape - Mulch	\$3,500
1-2 Year Total	\$1,291,500
3-5 Year Needs	
Mechanical - HVAC & Chilled Water	\$900,000
Exterior - Roof Sections A, B, & C	\$700,000
Mechanical - Air Handling	\$200,000
Electrical - Main Service	\$200,000
Site & Landscape - Outdoor Scoreboards	\$130,000
Electrical - Exterior Lighting	\$80,000
Site & Landscape - Track Surface	\$65,000
Interior - Ceilings	\$50,000
Interior - Casework	\$50,000
Site & Landscape - Outdoor Bleachers	\$50,000
Interior - Bathrooms	\$40,000
Electrical - Phase Protection	\$40,000
Electrical - Subpanels	\$35,000
Interior - Stairwell Flooring	\$30,000
Interior - Bleachers	\$30,000
Exterior - Doors	\$30,000
Interior - Doors	\$25,000
Interior - Flooring	\$25,000
Interior - Gym Flooring	\$25,000
Electrical - Cameras	\$15,000
Interior - Painting	\$10,000



West HS Strategic Plan

Wausau - West HS	
Project	Estimated Cost
Mechanical - Controls	\$10,000
Plumbing - Domestic Hot Water	\$10,000
Electrical - Availability	\$10,000
Site & Landscape - Baseball & Softball Turf Replacement	\$10,000
Mechanical - Pipe Insulation	\$5,000
3-5 Year Total	\$2,775,000
5-10 Year Needs	
Mechanical - HVAC & Chilled Water	\$3,100,000
Site & Landscape - Football Turf Replacement	\$1,000,000
Exterior - Roof Sections B&C	\$700,000
Site & Landscape - Baseball & Softball Turf Replacement	\$540,000
Mechanical - Air Handling	\$200,000
Electrical - Generator	\$150,000
Interior - Lockers	\$150,000
Interior - Auditorium Seating	\$100,000
Exterior - Tech Ed Storage	\$100,000
Interior - Doors	\$50,000
Interior - Flooring	\$50,000
Interior - Gym Flooring	\$50,000
Interior - Third Floor Finishes	\$50,000
Exterior - Tuckpointing	\$45,000
Interior - Bathrooms	\$40,000
Interior - Stairwell Flooring	\$30,000
Exterior - Doors	\$20,000
Interior - Painting	\$10,000



West HS Strategic Plan

Wausau - West HS	
Project	Estimated Cost
Plumbing - Domestic Hot Water	\$5,000
Exterior - Windows	\$5,000
5-10 Year Total	\$6,395,000
West High School 10-Year Strategic Plan Total	\$10,461,500



Prepared by:



CESA 10 Facilities Management

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Wausau School District - Horace Mann

FIM Code	Site/Bldg.	System/ Component	General Description	Recommendation	1-2 Year	3-5 Year	5-10 Year	Total 1-10 Year
X-001	Horace Mann MS	Exterior Building - Roofing	Roof sections A-G and I, totaling 66,500 sq. ft., are all roughly 22 years old and out of warranty. All of the M section roofs, covering former standing seam metal roof, are also 22 years old and out of warranty. Inspect these M roofs thoroughly in attempt to extend life given a strong underlying roof. Roof sections H, J, & K come out of warranty in 2025, however should have roughly 5-10 years of life remaining. From Google Earth historical imagery, it did not appear that all M roofs are of the same vintage, as roofing reports state.	Replace sections A-G and I in 3-5 years, expect to replace sections H, J, K, and the M roofs in 5-10 years.		\$800,000	\$1,100,000	\$1,900,000
X-002	Horace Mann MS	Exterior Building - EIFS	The school is experiencing ongoing problematic leaking in the gym roof/EIFS wall area. Concrete panels by pool entrance doorways leaking. These issues have been difficult to solve and has been bringing water into the building for years.	Complete upper EIFS demo/reflash/reconstruction. Extend or modify scupper to prevent staining. Professionally clean face brick.	\$250,000			\$250,000
I-011	Horace Mann MS	Interior - Bathrooms	Additional women's restrooms are needed during sporting events .	Add or expand women's restrooms in sporting event areas.		\$175,000		\$175,000
I-012	Horace Mann MS	Interior - Large Group	The large group room seating and flooring is showing its age. Carpet is wearing, showing through to backing in some areas. Seating is worn and uncomfortable.	In order to replace the carpeting, the seating must be removed. Seating is worn but functional. Determine if the district would like to refurbish and reinstall or purchase new seating. A band-aid fix would be to replace the worn stair sections with a rubber tread material. Pricing given for full replacement of flooring and seating.			\$150,000	\$150,000
I-014	Horace Mann MS	Interior - Sports Lockers	Although functional, the lockers in the sports locker rooms are dated by today's standards and could use updating.	Replace the sports lockers as budget allows.			\$125,000	\$125,000
M-007	Horace Mann MS	Mechanical - Shop Dust Collection	The Tech-Ed dust collection system is functional but original, making it 32 years old, past its expected life. A new system will be more reliable and energy efficient.	Replace and upgrade the dust collection system in the next 1-5 years.		\$125,000		\$125,000
I-009	Horace Mann MS	Interior - Pool Deck and Equipment	The pool deck tile has several locations of past spot replacement and was noted during staff interviews as an area of concern.	The pool deck will likely need attention in the next 3-7 years. At this time determine if the district would like to redeck the entire pool area or continue with spot replacement.			\$100,000	\$100,000

Wausau School District - Horace Mann

FIM Code	Site/Bldg.	System/ Component	General Description	Recommendation	1-2 Year	3-5 Year	5-10 Year	Total 1-10 Year
E-003	Horace Mann MS	Electrical - Breakers	The large Square D Model 5 motor control center in the second floor mechanical room is obsolete. Parts may be difficult to obtain on the used market.	Replace the obsolete breaker panel with modern equipment in the next 5-10 years.			\$75,000	\$75,000
I-008	Horace Mann MS	Interior - Ceiling Tile	A portion of the original facility has dated 2'x4' acoustical ceiling tile showing it's age. Additionally, corridor tile is damaged from the ongoing gym roof/wall water leak.	Consider replacing the 2x4 tile with 2x2 during the pending lighting upgrade at the school. 2x2 tile is more resilient and does not sag nearly as quickly as 2x4.			\$75,000	\$75,000
I-010	Horace Mann MS	Interior - Bathrooms	Some bathroom partitions are in poor condition and scratched.	Replace bathroom partitions as necessary with modern composite partitions.		\$35,000	\$35,000	\$70,000
I-001	Horace Mann MS	Interior - Gym Flooring	Although in good overall condition, the main gym floor is scuffed and scratched.	Maintain a wood floor refinishing cycle. Recommend every 5-10 years dependent on use and condition.	\$5,000	\$5,000	\$40,000	\$50,000
S-002	Horace Mann MS	Site & Landscape	Track has cracks into the asphalt base and worn surface.	Repair base asphalt and resurface track.		\$50,000		\$50,000
S-010	Horace Mann MS	Site & Landscape	Increase routine planters landscaping maintenance.	Annually or more often if needed prune, thin, and remove invasive vegetation in planters and around building perimeters, fencing, hardscape surface edges, and utility supply areas.	\$5,000	\$15,000	\$25,000	\$45,000
S-001	Horace Mann MS	Site & Landscape	Set routine asphalt maintenance schedule with area rotation.	Continue crack clean and crack fill as needed. Every 3-5 years seal and repaint asphalt.	\$5,500	\$11,000	\$25,000	\$41,500
S-003	Horace Mann MS	Site & Landscape	Multiple concrete walk slabs with transitional and divided cracks.	Replace cracked concrete walk slabs.	\$5,000	\$10,000	\$25,000	\$40,000
S-005	Horace Mann MS	Site & Landscape	Exterior concrete light pole bases have deteriorated. Ongoing issue per staff interviews.	Replace light pole bases.		\$40,000		\$40,000
I-002	Horace Mann MS	Interior Wood Doors	A fair amount of original and later vintage wood doors throughout the facility are in poor condition; delaminating, stained, and chipped. Wood doors near the pool area are in particularly rough condition.	Replace aged and damaged interior wood doors.	\$10,000	\$10,000	\$15,000	\$35,000
X-003	Horace Mann MS	Exterior - Doors	Although minimal, some sets of exterior steel doors are deteriorating. One set of gym doors is rusting through.	Complete a through facility exterior door inventory and replace as necessary. Expect to replace several door sets in the next 1-5 years.	\$5,000	\$10,000	\$20,000	\$35,000
I-003	Horace Mann MS	Interior - Flooring	A moderate amount of carpeting throughout the building is due for replacement as a normal maintenance activity.	Replace carpeting as needed.	\$5,000	\$10,000	\$15,000	\$30,000

Wausau School District - Horace Mann

FIM Code	Site/Bldg.	System/ Component	General Description	Recommendation	1-2 Year	3-5 Year	5-10 Year	Total 1-10 Year
E-004	Horace Mann MS	Electrical - Pool Lighting	Pool lighting position above pool edge restricts ease of access. Ongoing issue per staff interviews.	Relocate and update lighting to provide safer accessibility.		\$28,000		\$28,000
M-006	Horace Mann MS	Mechanical - Cafetorium Destrat Fans	The large group room and cafetorium has no destratification fans. Large high ceiling spaces, especially ones fed air from the ceiling, tend to hold their heat at the ceiling. This will increase comfort and lower heating costs.	Install destrat fans in the cafetorium.		\$25,000		\$25,000
M-003	Horace Mann MS	Mechanical - Domestic Hot Water	Of the three units found during auditing, two units have been in service 18 years and are well past their expected life. The third unit is six years old.	Expect to replace the two older water heaters in the next 1-5 years.	\$15,000		\$7,500	\$22,500
I-013	Horace Mann MS	Interior - IMC Masonry	Significant step cracking at CMU masonry joints was documented in the southeast corner of the library.	Determine the cause of the shifting and eliminate the source. Grind joints, re-mortar, and paint. Given known issues in the area of the cracking, recommend addressing exterior grades in the area to pitch away from the building, roof ice dam in area, EIFS issues and exterior caulk.	\$20,000			\$20,000
M-005	Horace Mann MS	Mechanical -Pool Pumps	Pool mechanical areas are in need of frequent maintenance. The circulation pump appears in need of upgrade.	Ongoing pool mechanical maintenance placeholder.	\$10,000	\$10,000		\$20,000
X-006	Horace Mann MS	Exterior Building	Moisture and precipitation infiltrates exterior brick walls next to doors #2 and #13 with directional wind. Ongoing issue per staff interviews.	Tuck point to provide weeps, drip edges, flashing, and sealing to prevent water from entering and allow water to drain out.		\$20,000		\$20,000
E-002	Horace Mann MS	Electrical - Door Access	Card Access systems across the district are in need of upgrade to their board controllers. Information was compiled through district IT interviews and recommended per school individual need.	Replace HID Vertex boards to Mercury LP1502's.	\$16,000			\$16,000
E-001	Horace Mann MS	Electrical - Cameras	Horace Mann was identified during staff interviews as in need of more cameras, particularly in gym areas, back hallways, and exterior to the West (Door #9).	Add additional security cameras as needed. Include wider range 180/360 degree cameras. Pricing given to add 10 cameras.	\$15,000			\$15,000

Wausau School District - Horace Mann

FIM Code	Site/Bldg.	System/ Component	General Description	Recommendation	1-2 Year	3-5 Year	5-10 Year	Total 1-10 Year
M-001	Horace Mann MS	Mechanical - Office AHU	It was brought up during staff interviews to move the current office AHU, which is on it's own DX cooling vs. the chiller, on to the chilled water system.	CESA 10 does not recommend moving this unit over to chilled water. Operational function of schools is under constant change and needing to run the chilled water system only to cool the office (should that ever happen) would be a large energy waste. Maintain and/or replace the small DX unit as necessary.			\$15,000	\$15,000
M-008	Horace Mann MS	Mechanical - Air Distribution	Excessive positive air pressure pushes doors open or resists proper closure to latch doors closed.	Calibrate and air balance system to verify adequate pressure. Adjust door closures if latching is still not occurring.	\$15,000			\$15,000
S-006	Horace Mann MS	Site & Landscape	Outdoor softball and physical education storage sheds do not have electrical power.	Add electrical service to the sheds.		\$15,000		\$15,000
X-005	Horace Mann MS	Exterior - Structural Steel Columns	Steel columns rusted out. Concrete riser added to column outside of Door #12.	Replace columns, coat, and seal.		\$15,000		\$15,000
I-007	Horace Mann MS	Interior -Gym Ceiling	Acoustical ceiling pads in the gym are coming down in some areas likely due to area water infiltration.	Although the condition of the ceiling blankets could not be determined from the ground. It is likely that these just need to be retaped/resecured after the water leaks are addressed.		\$10,000		\$10,000
M-002	Horace Mann MS	Mechanical - Backup Pool Boiler	The 750K BTU high efficiency backup gas fired pool boiler is 18 years old and has never run. The main source of pool water heat is through a heat exchanger on the main boilers. This boiler should have roughly 10 years of life remaining.	Due to it's size and age this boiler likely does not have a use within the district and is worth very little. Determine if the district would like to demo and remove the boiler to save mechanical room space and reduce maintenance. Heating the pool with this unit would be more efficient than the heat exchanger. Pricing given for demo.			\$10,000	\$10,000
I-016	Horace Mann MS	Interior - Stairs	Limited safe accessibility on large interior stairs with hand rails only on the sides of steps.	Add center handrail for increased accessibility and to separate directional student foot traffic flow.		\$8,500		\$8,500
X-004	Horace Mann MS	Exterior - Doors	Automatic door opener needed for ADA compliance at Door #13. Ongoing issue per staff interviews.	Add automatic door operator to exit/entry door.		\$8,500		\$8,500
S-004	Horace Mann MS	Site & Landscape	Traffic flow is hampered by 3-way and 4-way stops at road exits.	Work with municipality to provide school exit priority with Sell St. (south) left turn only no stop 2-way exit and N. 13th St. (north) right turn only no stop 3-way exit during dismissal period.	\$7,500			\$7,500
I-015	Horace Mann MS	Interior - Lockers	Locker locks are difficult to operate and often not used due to poor operation. Ongoing issue per staff interviews.	Replace locks or establish an open locker policy.	\$6,500			\$6,500

Wausau School District - Horace Mann

FIM Code	Site/Bldg.	System/ Component	General Description	Recommendation	1-2 Year	3-5 Year	5-10 Year	Total 1-10 Year
M-004	Horace Mann MS	Mechanical - Pipe Insulation	Missing and damaged HVAC and domestic water pipe insulation was noted during audit.	Replace and/or install damaged/missing insulation.	\$5,000			\$5,000
I-004	Horace Mann MS	Interior - Structural	Floor expansion joints are open and not covered.	Replace or add rubber covers to open expansion joints.	\$3,000			\$3,000
I-005	Horace Mann MS	Interior - Structural	Cafetorium - Structural walls integrity uncertain.	Review referendum findings. Set plans to correct as necessary.	\$2,500			\$2,500
I-017	Horace Mann MS	Interior - Elevator	Elevator carpet tiles are worn, torn, and stained.	Replace elevator carpet tiles.	\$1,000			\$1,000
Total					\$407,000.00	\$1,436,000.00	\$1,857,500.00	\$3,700,500.00

Wausau School District - John Muir

FIM Code	Site/Bldg.	System/ Component	General Description	Recommendation	1-2 Year	3-5 Year	5-10 Year	Total 1-10 Year
E-001	John Muir MS	Electrical - Surge Protection	Loss of phase and power surges have become an issue in John Muir.	The district is currently working with an electrical engineering company to rectify these issues across the district. Our recommendation is to prioritize the individual issues at the various sites and compare project costs from multiple vendors.		\$35,000		\$35,000
E-002	John Muir MS	Electrical - Cameras	John Muir was identified during staff interviews as in need of more cameras, particularly in gym areas.	Add additional security cameras as needed. Include wider range 180/360 degree cameras. Pricing given to add 10 cameras.	\$15,000			\$15,000
E-003	John Muir MS	Electrical - Door Access	Card Access systems across the district are in need of upgrade to their board controllers. Information was compiled through district IT interviews and recommended per school individual need.	Replace HID Vertex boards to Mercury LP1502's.	\$34,000			\$34,000
I-001	John Muir MS	Interior - Gym Flooring	The main gym floor is scuffed, scratched, and overdue for refinishing.	Sand, paint, and refinish gym floor in next 1-2 years. Maintain a wood floor refinishing cycle, recommended every 5-10 years dependent on use and condition.	\$35,000			\$35,000
I-002	John Muir MS	Interior - VCT Flooring	Original 1960 facility VCT flooring is deteriorating and showing its age. Cracks and permanent staining were evident. This flooring likely contains asbestos mastic which will add to demolition cost.	Replace original VCT flooring as budget allows. Abate asbestos-containing material as needed. Pricing given without abatement costs included.	\$15,000	\$20,000	\$150,000	\$185,000
I-003	John Muir MS	Interior - Ceramic Tile	Although minimal, some ceramic floor tile is extensively cracked.	Spot replacement as necessary.	\$15,000			\$15,000
I-004	John Muir MS	Interior - Bathrooms	Some bathroom partitions are in poor condition and scratched.	Replace bathroom partitions as necessary with modern composite partitions.		\$35,000	\$35,000	\$70,000
I-005	John Muir MS	Interior - Bathrooms	Additional staff restrooms are needed, especially on second floor.	Add staff restrooms to second floor.		\$120,000		\$120,000
I-006	John Muir MS	Interior - Elevators	The main elevator is being refurbished within the referendum project, however the cargo elevator is in need of minor maintenance.	Perform a basic service maintenance call from the elevator manufacturer. Paint the elevator.		\$5,000		\$5,000
I-007	John Muir MS	Interior - Science FF&E	Several science rooms were found to have dated casework and furniture. Most equipment appeared to be in average to good condition, functioning well.	Replace dated classroom casework and FF&E as budget allows.			\$150,000	\$150,000

Wausau School District - John Muir

FIM Code	Site/Bldg.	System/ Component	General Description	Recommendation	1-2 Year	3-5 Year	5-10 Year	Total 1-10 Year
I-008	John Muir MS	Interior - Wood Doors	Although not extensive, wood doors throughout the facility were occasionally found to be in poor condition; chipped, scratched, and delaminating.	Budget to replace 15 wood doors every three years for 10 years.	\$15,000	\$17,500	\$20,000	\$52,500
I-009	John Muir MS	Interior - Pool Size	The pool is small and interviews revealed an additional lane is desired.	Complete a comprehensive evaluation and study for the pool area. Increasing size and upgrading system and finishes are expensive options to consider.	\$15,000			\$15,000
I-010	John Muir MS	Interior - Pool Deck Structural	The underdeck tunnel area surrounding the pool is degrading. In certain areas, concrete reinforcement is severely rusting and has popped concrete out of the structure.	Work with a structural engineer to identify if there is any immediate risk and put forth a repair plan. This will likely include chipping away loose concrete, grinding, painting rebar, and reapplying new concrete. The longer this repair is deferred, the worse the situation will get.	\$50,000			\$50,000
I-011	John Muir MS	Interior - Pool Deck and Equipment	The pool deck tile has locations of past spot replacement and some tile grout is missing. Stainless steel rails, pool start stations, and judge station are rusting.	The pool deck will likely need attention in the next 3-7 years. At this time determine if the district would like to redeck the entire pool area or continue with spot replacement. Replace or refurbish pool equipment in conjunction with a deck project.			\$175,000	\$175,000
I-012	John Muir MS	Interior - Pool Stairwell	The stairwell area just east of the pool is showing evidence of water in the east wall, both on the main floor and upstairs. Effervescence and staining can be seen in the wall.	Identify the source of water infiltration and eliminate the source. Scrub the walls.	\$5,000			\$5,000
I-013	John Muir MS	Interior - Stairs	Chipped terrazzo stair steps.	Patch or cover with known tread materials used at other sites.		\$15,000		\$15,000
I-014	John Muir MS	Interior - Consumer Services	The existing consumer services is no longer adequate per the popularity of cooking and sewing.	Open up the lab areas for supervision observation and student/instructor work areas.		\$75,000		\$75,000
I-014	John Muir MS	Interior - Kitchen Operations	The kitchen service area currently cannot accept pallets of product. Food prep workspace is small and inefficient. No cart spray area.	Install a pallet door and perform minor renovation/reconfiguration of food prep area.		\$40,000		\$40,000

Wausau School District - John Muir

FIM Code	Site/Bldg.	System/ Component	General Description	Recommendation	1-2 Year	3-5 Year	5-10 Year	Total 1-10 Year
M-001	John Muir MS	Mechanical - Air Handling	E1 AHU/DX system has frequently been problematic. Additionally, ongoing mechanical maintenance due to system complexity.	Replace the E1 AHU/DX unit in the next 3-5 years. Air handling mechanical equipment in this school is in fair condition overall. Several units have had sections mothballed due to past failures. Given the age of the equipment, it is recommended to continue to maintain due to the high cost of replacement. Mechanical maintenance costs at Muir will be higher compared to average schools.	\$25,000	\$450,000	\$200,000	\$675,000
M-002	John Muir MS	Mechanical - Pool Heat Exchanger	Pool heat exchanger is undersized. Heating the pool following a drain creates significant downtime. Additional capacity is available on the boiler side.	Replace pool heat exchanger with a larger unit.		\$35,000		\$35,000
M-003	John Muir MS	Mechanical - Domestic Hot Water	Of the five units in the main boiler area, three were recently installed. Two are 13 and 15 years old.	Expect to replace the two older water heaters in the next 1-5 years.	\$7,500	\$7,500		\$15,000
M-004	John Muir MS	Mechanical - Pipe Insulation	Missing and damaged HVAC and domestic water pipe insulation was noted during audit.	Replace and/or install damaged/missing insulation	\$10,000			\$10,000
S-001	John Muir MS	Site & Landscape	Existing traffic and drop-off inefficient and unsafe.	Procure a civil firm to perform a site traffic study for a future traffic reconfiguration. Consider re-establishing drive on to highway 52 as temporarily provided for construction.	\$15,000			\$15,000
S-002	John Muir MS	Site & Landscape	Site has building surface water intrusion issues. Receiving area needs regrading and the west side of the new gym has site grading pitching to the building.	Survey and engineer to reshape/regrade and drain site appropriately to stormwater systems.	\$10,000	\$25,000		\$35,000
S-003	John Muir MS	Site & Landscape	Southeast parking lot is in failing condition.	Hire a civil firm to design a rework and resurface the lot. Ensure stormwater utilities are properly in place.		\$350,000		\$350,000
S-004	John Muir MS	Site & Landscape	Parking space deficient.	Recommend additional parking space be included in strategic planning. Install additional parking.		\$160,000		\$160,000
S-005	John Muir MS	Site & Landscape	Site concrete sidewalks in poor condition.	Replace surrounding concrete sidewalk as needed.		\$50,000		\$50,000
S-006	John Muir MS	Site & Landscape	Insufficient amount of site sidewalk in place surrounding site. Temporary construction driveway has become critical to normal operation.	Add sidewalks appropriately in alignment with traffic flow, parking, and overall site master plan.		\$65,000		\$65,000

Wausau School District - John Muir

FIM Code	Site/Bldg.	System/ Component	General Description	Recommendation	1-2 Year	3-5 Year	5-10 Year	Total 1-10 Year
S-006	John Muir MS	Site & Landscape	Additional outdoor storage shed space needed	Expand existing or add additional shed.		\$20,000		\$20,000
X-001	John Muir MS	Exterior Building Roofing	Roof sections X-Y are 21-23 years old and out of warranty. These roofs should be replaced in the next 2-5 years. Various other sections (A-F) begin to come out of warranty in 2025-2027, however should have life left until roughly 2030-35.	Replace roof sections X and Y in the next 3-5 years. Expect to start seeing issues in roof sections A-F in 7-10 years.		\$200,000	\$625,000	\$825,000
X-002	John Muir MS	Exterior Building Windows	Windows of the 1990's addition are reaching end of expected lifecycle.	Plan, fund, and schedule for future replacement.			\$160,000	\$160,000
Total					\$266,500.00	\$1,725,000.00	\$1,515,000.00	\$3,506,500.00

Wausau School District - Longfellow

FIM Code	Site/Bldg.	System/ Component	General Description	Recommendation	1-2 Year	3-5 Year	5-10 Year	Total 1-10 Year
M-003	Longfellow	Mechanical - HVAC Renovation	The Longfellow facility has multiple HVAC issues, some spelled out individually. This FIM identifies a full mechanical renovation at the facility replacing air handlers and piping. The facility uses a single-pipe system, heating and cooling water is run within the same pipe, making temperature control impossible at times in spring/fall. The air handler of the annex is plugged and no longer operating, not allowing code minimum fresh air to the space. All AHU's have been modified and are past their expected useful life.	Perform a full air & water piping HVAC renovation to the facility, installing both hot and chilled water piping. This FIM does not include boiler and chiller replacement identified elsewhere. If this entire project is not performed, replacing AHU-1 in the annex is high priority. (est. \$125,000) Perform this FIM at the same time as boiler/chiller replacement.		\$950,000		\$950,000
X-001	Longfellow	Exterior Building Roofing	Longfellow is made up of an 8,500 sq. ft. flat adhered rubber section, and a 7,200 sq. ft. shingled section. Both sections are 30 years old, well past their expected lifespan, and 15 years out of warranty.	Replace all roofing of Longfellow in the next 1-3 years.	\$175,000			\$175,000
M-001	Longfellow	Mechanical - Boilers	The facility is heated by older relocated boilers from Jefferson. These boilers are 23 years old, close to the end of their expected useful life.	Replace the boilers with high efficiency condensing boilers in the next 3-5 years. Remove the unused shoulder boiler. Do not replace boilers if HVAC renovation is being considered.		\$125,000		\$125,000
I-007	Longfellow	Interior - Facade	Much of the interior of the facility is of dated wood paneling. Paneling shows its age and needs refinishing. Walls need painting and updating.	Update and renovate the interior aesthetics of the facility, if desired. Perform standard refinishing and painting maintenance.	\$5,000	\$5,000	\$100,000	\$110,000
I-002	Longfellow	Interior - Elevator	Elevator aging and in need of component/control upgrades.	Perform elevator control upgrades.		\$100,000		\$100,000
E-008	Longfellow	Electrical - Fire Alarm	The Simplex fire alarm system in the facility is obsolete and no longer supported by the manufacturer.	Upgrade fire alarm to Edwards standard used across the district.	\$90,000			\$90,000
I-003	Longfellow	Interior - Fire Hazard	The original 1894 structure is composed of an open truss, wood-framed attic. The space is used for paper and materials storage, and HVAC. It is not sprinkled but does have smoke detection.	Install a dry sprinkler system into the attic space.			\$80,000	\$80,000

Wausau School District - Longfellow

FIM Code	Site/Bldg.	System/ Component	General Description	Recommendation	1-2 Year	3-5 Year	5-10 Year	Total 1-10 Year
E-006	Longfellow	Electrical - Annex Main	The main electrical equipment feeding the annex is original 1963 and well beyond it's expected life. The equipment is obsolete and parts will be very difficult to find if needed. The electrical room is being used as janitorial storage.	Replace all the annex electrical main gear. Keep code clearance in front of electrical panels.		\$75,000		\$75,000
I-001	Longfellow	Interior - ADA	ADA access does not transition between the Annex and original building. Wheelchair access is not provided between the two buildings.	Install an accessibility lift between the two facilities.		\$75,000		\$75,000
M-004	Longfellow	Mechanical - Chiller	The Trane 40-ton chiller is 35 years old, many years past it's useful life, and undersized.	Replace the chiller and increase capacity. Do not replace chiller if HVAC renovation is being considered.	\$75,000			\$75,000
E-001	Longfellow	Electrical - Bell/PA & Communication	PA/Bell/Clock/mass communication systems due for upgrade. Existing system is obsolete using decades old technology.	Replacement recommended to Singlewire standard.		\$70,000		\$70,000
X-004	Longfellow	Exterior - Soffit/Facia	Large icicles around roof edges of the original and 1990 additions causing ice dams and heavy ice edge build up. Anticipate moisture infiltration during warmer seasons.	Air seal around perimeter of attic areas. Add underlayment ice and water shields to lower roof sections as part of roof replacement. Consider installing ice melt system ii problems persists.	\$65,000			\$65,000
E-004	Longfellow	Electrical - Whole Building Lighting Upgrade	The facility is in need of a whole building lighting upgrade from fluorescent to LED. Interior lighting projects typically provide a 6 year simple payback, along with giving building occupants the ability to adjust light levels to their liking. Additionally, the systems have a 20+ year lifespan, drastically reducing maintenance required to change lamps and ballasts.	Perform a whole building lighting conversion to LED fixtures including occupancy sensors in appropriate spaces, and dimming control. Before moving forward, ensure it is the district's intention to stay in this facility for 5+ years to break even on the investment.		\$60,000		\$60,000
I-004	Longfellow	Interior - Flooring	Some carpeting throughout the building is due for replacement with clear traffic wear showing. A minimal amount of VCT tile is in poor condition. Some tile appears to be asbestos containing.	Replace carpeting and tile. Abate asbestos if necessary. Pricing does not include abatement.	\$10,000	\$35,000	\$10,000	\$55,000
X-002	Longfellow	Exterior - Tuckpointing	Tuck pointing and masonry repairs needed. Most noticeable are brick corners of the original building. Some decorative stone cracking and deteriorating.	Re-tuck walls, replace missing and damaged masonry and mortar.		\$55,000		\$55,000
S-001	Longfellow	Site & Landscape	Front walk in poor condition. Concrete is in need of maintenance.	Replace cracked concrete walk slabs. Grind or level uneven slabs.	\$35,000	\$5,000	\$5,000	\$45,000

Wausau School District - Longfellow

FIM Code	Site/Bldg.	System/Component	General Description	Recommendation	1-2 Year	3-5 Year	5-10 Year	Total 1-10 Year
M-002	Longfellow	Mechanical - Boiler Pumps	Boiler pumps are installed in a manner which significantly delays maintenance in the event of a pump failure. Pump housing must be removed to address a motor problem.	Reconfigure pump mounting during boiler changeout in 3-5 years.		\$35,000		\$35,000
X-003	Longfellow	Exterior - Soffit/Facia	Painted metal soffit and facia around 1963 addition chipped and peeling.	Prepare and paint soffits and fascia. Consider cladding in aluminum to improve appearance and extend durability.		\$35,000		\$35,000
E-007	Longfellow	Electrical - Exterior Transformer	Electrical service to building is supplied through a wood pole mounted transformer.	Replace existing transformer with a secured ground mounted transformer.			\$30,000	\$30,000
I-006	Longfellow	Interior - Annex Connector Block	The CMU block wall of the pass-through stairwell connecting the two buildings is showing evidence of water intrusion.	Investigate issue further, ensure no roof water is collecting in the connector area. If further action is needed, excavate, install waterproof vapor barrier, insulate, and backfill. Scrape and repaint interior CMU.	\$2,500		\$25,000	\$27,500
E-003	Longfellow	Electrical - Door Access	Card Access systems across the district are in need of upgrade to their board controllers. Information was compiled through district IT interviews and recommended per school individual need.	Replace HID Vertex boards to Mercury LP1502's.	\$26,000			\$26,000
M-005	Longfellow	Mechanical - Domestic Hot Water	The 50-gallon Rheem electric water heater in the building is 35 years old, 20 years past it's expected service life. Changing over the unit to natural gas will save utility costs at the facility. The annex heater is 8 years old but also electric.	Replace the water heater with natural gas in the next 1-2 years.	\$5,000		\$7,500	\$12,500
E-002	Longfellow	Electrical - Cameras	Additional cameras needed at Longfellow were identified during staff interviews.	Add additional (5) cameras.		\$10,000		\$10,000
I-005	Longfellow	Interior - Ceiling Tile	Several rooms have dated 2'x4' acoustical ceiling tile. The tile is showing its age.	Replace aged 2x4 tile with 2x2.		\$10,000		\$10,000
E-005	Longfellow	Electrical - Exterior Lighting	Non-LED wall packs and exit canopy lighting.	Replace with new LED fixtures.		\$7,500		\$7,500
S-003	Longfellow	Site & Landscape	Open cracks in asphalt.	Crack clean and crack fill as needed. Additionally seal and repaint asphalt.	\$4,800			\$4,800
S-002	Longfellow	Site & Landscape	Outdoor shed paint is peeling.	Paint shed. Consider siding to improve appearance and extend durability.	\$2,500			\$2,500
S-004	Longfellow	Site & Landscape	Natural gas supply meter and piping unprotected providing unsecure access.	Fence in to isolate. Consider fencing along with other adjacent HVAC and mechanical equipment next to building.		\$2,500		\$2,500

Wausau School District - Longfellow

FIM Code	Site/Bldg.	System/ Component	General Description	Recommendation	1-2 Year	3-5 Year	5-10 Year	Total 1-10 Year
Total					\$495,800.00	\$1,655,000.00	\$257,500.00	\$2,408,300.00

Wausau School District - East HS

FIM Code	Site/Bldg.	System/Component	General Description	Recommendation	1-2 Year	3-5 Year	5-10 Year	Total 1-10 Year
X-001	East HS	Exterior - Building Roofing	Although within it's typical expected lifespan, much of East's original roof is experiencing multiple failures.	Replace all 2003 vintage roof sections (A-T) in the next 1-5 years, as budget allows.	\$1,450,000	\$1,450,000		\$2,900,000
S-003	East HS	Site & Landscape	All of East's turf baseball, softball, and football fields are in poor condition and in need of replacement.	Replace all turf surfaces.			\$1,800,000	\$1,800,000
S-001	East HS	Site & Landscape	Major subbase issues in main lots. Poor drainage due to high rock content.	Hire a civil engineering firm to design a new lot with proper subbase drainage. Excavate and replace the parking lots. Include lighting repair/replacement included in a separate FIM.	\$200,000	\$350,000	\$500,000	\$1,050,000
M-005	East HS	Mechanical- Boilers	Aside from the 2016 addition boiler, all 8 remaining boilers in the facility are 21 years old and approaching their end of life.	Expect to replace all eight original boilers in 5-10 years.			\$700,000	\$700,000
E-003	East HS	Electrical - Bell/PA & Communication	PA/Bell/Clock/mass communication systems due for upgrade. Existing system is obsolete using decades old technology.	Replacement recommended to Singlewire standard.	\$600,000			\$600,000
S-002	East HS	Site & Landscape	The tennis court area is failing. Cracked surfaces due to poor subbase drainage is occurring.	Hire a civil engineer to design a new court surface system with proper subbase drainage. Excavate and replace the courts entirely.		\$600,000		\$600,000
E-001	East HS	Electrical - Exterior Pole Base Lighting	Due to freeze/thaw and drainage issues in the main parking lot (addressed in separate FIM), the parking lot lights are heaving and wiring breaks are occurring.	Replace damaged pedestals and rewire during parking lot project. Include electrical in parking lot design.		\$200,000	\$200,000	\$400,000
M-003	East HS	Mechanical - Air Handling	Ongoing mechanical maintenance due to system complexity.	Air handling mechanical equipment in this school is in fair condition overall. Several units have had sections mothballed due to past failures. Given the age of the equipment, it is recommended to continue to maintain due to the high cost of replacement. Recent cooling issues demand frequent follow up until resolved. Mechanical maintenance costs at East will be higher compared to average schools.		\$150,000	\$150,000	\$300,000
I-001	East HS	Interior - Gym Flooring	Although in good overall condition, the main gym floor is scuffed and scratched. The gyms are due for major sanding and refinishing in the next 3-7 years.	Maintain a wood floor refinishing cycle, recommended every 5-10 years dependent on use and condition.	\$5,000	\$55,000	\$75,000	\$135,000

Wausau School District - East HS

FIM Code	Site/Bldg.	System/Component	General Description	Recommendation	1-2 Year	3-5 Year	5-10 Year	Total 1-10 Year
I-004	East HS	Interior - Ceramic Flooring	Areas of the school are seeing extensive failure of grout lines between ceramic tile.	RegROUT entire sections of areas with widespread failed grout.	\$30,000	\$10,000	\$25,000	\$65,000
X-005	East HS	Exterior Building	Tuckpointing and masonry repairs are needed. Stained face brick with open, missing, and deteriorating mortar.	Re-tuck walls, replace missing and damaged masonry, and professionally clean stone and bricks.			\$65,000	\$65,000
E-004	East HS	Electrical - Door Access	Card Access systems across the district are in need of upgrade to their board controllers. Information was compiled through district IT interviews and recommended per school individual need.	Replace HID Vertx boards to Mercury LP1502's.	\$62,000			\$62,000
I-007	East HS	Interior - Bleachers	East's bleachers are constructed of a plastic material easily damaged by balls. Also, frequent issues occur when pulling out the bleachers with electric motors not pulling in unison, binding the bleachers on their way out.	Install protective bleacher netting. Have the manufacturer go through the motor and pulley system to extend the life of the bleachers. Budget to replace damaged plastic bleacher rows.	\$30,000	\$5,000	\$10,000	\$45,000
E-002	East HS	Electrical - Front Sign	The main East High School electronic sign is obsolete, failing, and in need of replacement.	Replace electrical components of front sign.	\$40,000			\$40,000
M-001	East HS	Mechanical - Boiler Pumps	Boiler systems have no backup pump system. Only single pumps were installed originally which is not standard practice. If a pump has a failure, the system is without heat until repaired.	Install secondary backup boiler pumps in each system during pending boiler replacements.			\$40,000	\$40,000
M-004	East HS	Mechanical - Gym Destrat Fans	High spaces in the facility have no destratification fans. Large high ceiling spaces, especially ones fed air from the ceiling, tend to hold their heat at the ceiling. This will increase comfort and lower heating costs.	Install destrat fans in the gym, cafeteria, and library.		\$35,000		\$35,000
X-004	East HS	Exterior	Window steel lintels rusty.	Prepare and paint with weather resistant coatings. Consider completion with major sill restoration project.		\$30,000		\$30,000
S-007	East HS	Site & Landscape	Multiple concrete walk slabs with transitional and divided cracks.	Replace cracked concrete walk slabs.		\$28,000		\$28,000

Wausau School District - East HS

FIM Code	Site/Bldg.	System/Component	General Description	Recommendation	1-2 Year	3-5 Year	5-10 Year	Total 1-10 Year
I-003	East HS	Interior - Wood Doors	A small amount of wood doors throughout the facility are in poor condition; delaminating, stained, and chipped. Wood doors near maintenance, art, and consumer education were noted.	Replace aged and damaged interior wood doors.	\$15,000	\$20,000	\$25,000	\$60,000
M-006	East HS	Mechanical - Domestic Hot Water	Of the five units reviewed during the audit, two were recently installed, one is 12 years old, and the remaining two are 23 years old - well past their expected life.	Expect to replace two water heaters within the next 1-2 years, and one within 3-5 years.	\$15,000	\$7,500		\$22,500
X-007	East HS	Exterior Building	Light colored EIFS above exterior door entrances and large storefront windows are darkly stained.	Clean above areas. Seal and caulk openings. Prepare and paint to remove and cover stains.		\$21,000		\$21,000
I-005	East HS	Interior - VCT Tile	The bulk of the school's VCT tile in classrooms is in good condition. Small spot areas are in need of replacement. Room C105 was noted.	Replace VCT tile as needed.	\$5,000	\$5,000	\$10,000	\$20,000
I-006	East HS	Interior -Kitchen Operations	Through staff interviews the kitchen was identified as problematic for student traffic flow through the dish drop-off area. The dishwasher itself was identified as problematic and has frequent electrical issues.	Evaluate the dish drop-off space for flow and widen the doors or open the space entirely removing the wall. Have the dishwasher mfg. tech go through the machine and identify needed maintenance. Ensure power supply is adequate and upsize if necessary.	\$5,000	\$15,000		\$20,000
X-003	East HS	Exterior - Doors	Although minimal, some sets of exterior steel doors are deteriorating. One set of gym doors has rusted through completely.	Complete a through facility exterior door inventory and replace as necessary. Expect to replace several door sets in the next 1-5 years.		\$20,000		\$20,000
E-005	East HS	Electrical - Cameras	East High was identified during staff interviews as in need of more cameras, particularly in gyms and main entrance areas.	Add additional security cameras as needed. Include wider range 180/360 degree cameras. Pricing given to add 12 cameras.	\$18,000			\$18,000
X-006	East HS	Exterior - Building	Window sills internal reinforcing steel exposed.	Patch and seal or replace. Consider completion with major sill restoration project.			\$18,000	\$18,000
X-002	East HS	Exterior - Building	Failed and missing window caulk, joint compound, and sealant.	Remove failed and around areas of missing caulk. Re-caulk without blocking or sealing weeps.		\$15,000		\$15,000
I-002	East HS	Interior - Ceiling Tile	The bulk of the school's ceiling is in good condition. Some areas are damaged from ongoing roof leaks.	Replace damaged ceiling tile, evaluate if grid needs to be replaced. Perform this work after major roofing projects.		\$10,000		\$10,000

Wausau School District - East HS

FIM Code	Site/Bldg.	System/ Component	General Description	Recommendation	1-2 Year	3-5 Year	5-10 Year	Total 1-10 Year
M-002	East HS	Mechanical - Shop Air Compressor	The Tech-Ed shop air compressor has been problematic and is oversized.	Replace Tech-Ed air compressor and dryer in the next 5-10 years.			\$10,000	\$10,000
M-007	East HS	Mechanical - Pipe Insulation	Missing and damaged HVAC and domestic water pipe insulation was noted during the audit.	Replace and/or install damaged/missing insulation.	\$5,000	\$5,000		\$10,000
S-008	East HS	Site & Landscape	Dock is showing deterioration and metal leveler is rusting and staining concrete wall and base.	Remove rust stains and patch dock walls and base. Prepare and paint dock leveler with durable marine exterior paint.	\$8,500			\$8,500
S-009	East HS	Site & Landscape	Gas valve, meter, and piping on side of building not secured inside of fencing and provides potential climbing assistance to roof.	Enclose and secure gas valve, meter, and piping.	\$6,500			\$6,500
S-004	East HS	Site & Landscape	Set routine asphalt maintenance schedule with area rotation.	Continue crack clean and crack fill as needed. Include every 3-5 years seal and repaint asphalt.	\$5,500			\$5,500
S-005	East HS	Site & Landscape	Increase routine planters landscaping maintenance.	Annually or more often if needed prune, thin, and remove invasive vegetation in planters and around building perimeters, fencing, hardscape surface edges, utility supply areas.	\$5,000			\$5,000
X-008	East HS	Exterior - Storefront Doors	Various aluminum door sets are in need of maintenance upkeep. Doors off the cafeteria and near Tech-Ed were noted.	Replace thresholds, damaged trim, door sweeps, and weather seal. Scrape and recaulk the aluminum to floor tile transition.	\$5,000			\$5,000
S-006	East HS	Site & Landscape	Mulch washing out on to walks.	Annually or more often if needed refresh and retain mulch to an elevation lower than border, walk, or turf. Consider crushed gravel in lieu of mulch planters along walks and buildings.	\$3,500			\$3,500
Total					\$2,514,000.00	\$3,031,500.00	\$3,628,000.00	\$9,173,500.00

Wausau School District - West HS

FIM Code	Site/Bldg.	System/ Component	General Description	Recommendation	1-2 Year	3-5 Year	5-10 Year	Total 1-10 Year
M-002	West HS	Mechanical - HVAC & Chilled Water	One of the two main water cooled chilling plants has a failed condenser bundle - a costly repair. The chilled water plant is water cooled. This cooling tower is also in need of repair and a high maintenance item. Several complex large AHU's (namely 1, 2, & 15) have been frequently problematic with portions of their components shutdown and frequently plugging air streams.	Hire a mechanical design firm to create a long term HVAC plan for the school. Evaluate the pros/cons of abandoning water cooled chilled water with ice storage vs. air cooled chilled water. Consider replacements of AHU's 1, 2, & 15 to conventional dual-coiled VAV w/reheat units. Complete an in depth mechanical strategic plan prior to replacements to ensure conformity to long term plan. Pricing given for systematic replacement of higher priority issues. Budgeting provided assumes: chiller maintenance years 1-2, chiller plant and AHU15 replacement years 3-5, AHU's 1 & 2 area full mechanical replacement in years 5-10. Large scale AHU's 1&2 replacement should coincide with needed renovations to second floor science interior.	\$150,000	\$900,000	\$3,100,000	\$4,150,000
X-001	West HS	Exterior Building Roofing	Roof sections A 1&2, totaling 27,000 square feet, are 24 years old and long out of warranty. Other larger sections start to come out of warranty in 2027-28 and should be on the 5-10 year radar.	Replace the A sections in the next 2-5 years with an adhered 60 mil black EPDM 20 year warranty roof. Have budget available to replace the B&C sections in the 5-10 year plan if the roofs continue to be problematic. Modify or upgrade skylights as part of roofing plans to eliminate existing issues.	\$315,000	\$700,000	\$700,000	\$1,715,000
S-003	West HS	Site & Landscape	Football Field turf replacement.	Set funding plan for turf replacements.			\$1,000,000	\$1,000,000
S-002	West HS	Site & Landscape	Baseball and Softball turf replacement.	Repair pitchers mounds and batting boxes. Set funding plan for turf replacements.		\$10,000	\$540,000	\$550,000
M-004	West HS	Mechanical - Air Handling	Ongoing mechanical maintenance due to system complexity.	Air handling mechanical equipment in this school is in fair to poor condition. Several units have had sections mothballed due to past failures. Given the age of the equipment, it is recommended to continue to maintain due to the high cost of replacement. Mechanical maintenance costs at West will be higher compared to average schools.	\$25,000	\$200,000	\$200,000	\$425,000
S-008	West HS	Site & Landscape	Outdoor scoreboards for baseball and softball are failing and unreliable.	Replace failing scoreboards. Pricing given to replace four scoreboards, two at a time, over 5 years.	\$120,000	\$130,000		\$250,000
I-005	West HS	Interior - Stairwell Flooring	Terrazzo stairwells throughout the facility are in poor condition with many having major failures.	Prep the surfaces and install rubber tread. Address handrail issues.	\$180,000	\$30,000	\$30,000	\$240,000

Wausau School District - West HS

FIM Code	Site/Bldg.	System/ Component	General Description	Recommendation	1-2 Year	3-5 Year	5-10 Year	Total 1-10 Year
E-004	Wausau West	Electrical - Main Service	One of the main 3000A electrical services is of 1960's vintage, well beyond it's expected life, and obsolete for manufacturer support. Replacement parts will be difficult to find and expensive on the used market.	Replace the old 3000A main and its entire network of same vintage large breakers.		\$200,000		\$200,000
E-002	Wausau West	Electrical - Generator	Although no major problems were noted, West's emergency generator is showing its age, and approaching replacement from a typical expected lifespan perspective.	Budget to replace West HS emergency generator in the next 7-10 years unless expensive repairs arise prior.			\$150,000	\$150,000
I-008	West HS	Interior - Lockers	Although functional, a portion of West's student lockers are aging and should be scheduled for renovation or replacement. Determine if the district would like to continue to provide lockers to students long term before repair or replacement.	Plan to replace a large section of lockers in 7-10 years if desired to continue providing lockers. Locker removal can generate space for repurposing future student belonging storage. Consider HDPE smaller compartment type and style for durability and space saving.			\$150,000	\$150,000
I-004	West HS	Interior - Doors	A significant amount of interior wood and steel doors throughout the facility are in poor condition; rusting, delaminating, stained, and chipped.	Replace aged and damaged interior doors.	\$50,000	\$25,000	\$50,000	\$125,000
I-006	West HS	Interior - Flooring	A significant portion of the facility is in need of carpeting upgrades. Stained and worn carpet was noted in areas. Also mis-matched floor tile in some areas.	Replace carpeting ongoing. Replace mis-matched floor tile.	\$50,000	\$25,000	\$50,000	\$125,000
I-007	West HS	Interior - Bathrooms	Bathroom partitions are in poor condition, scratched and vandalized. Second & third floor restrooms are worn.	Replace bathroom partitions as necessary with modern composite partitions. Renovate second and third floor restrooms.	\$40,000	\$40,000	\$40,000	\$120,000
I-009	West HS	Interior - Auditorium Seating	Although in relatively good condition given it's age, the upper portion of the auditorium seating is much older than the recently replaced lower section. The lower section was replaced on an insurance claim due to flooding.	Budget to replace the upper auditorium seating in the next 5-10 years.			\$100,000	\$100,000
X-007	West HS	Exterior - Tech Ed Storage	A need was identified through staff interviews of insufficient storage space for materials necessary to provide the trades curriculum.	Hire a design firm to construct an unheated steel storage facility on school grounds, convenient for tech-ed usage.			\$100,000	\$100,000
I-003	West HS	Interior -Ceilings	Much of the second and third floors have not been updated to 2x2 ceiling tile. This tile is stained, sagging, and showing it's age.	Replace classrooms with 2x4 ceiling tile with 2x2 tile to update the spaces in the next 1-5 years. If possible, complete this work along with LED lighting upgrades.	\$50,000	\$50,000		\$100,000

Wausau School District - West HS

FIM Code	Site/Bldg.	System/ Component	General Description	Recommendation	1-2 Year	3-5 Year	5-10 Year	Total 1-10 Year
E-006	Wausau West	Electrical - Exterior Lighting	Exterior fiberglass light poles degrading and issues with control operation. School district owns the poles and WPS owns the light fixtures.	Replace district owned poles and repair or upgrade controls. Request WPS replace and upgrade fixtures as part of the pole replacement.		\$80,000		\$80,000
I-001	West HS	Interior - Gym Flooring	Although in good overall condition, the main gym floor is scuffed and scratched. The gyms are due for major sanding and refinishing in the next 3-7 years.	Maintain a wood floor refinishing cycle, recommended every 5-10 years dependent on use and condition.		\$25,000	\$50,000	\$75,000
X-003	West HS	Exterior - Doors	Sets of exterior steel doors are deteriorating. Large door set 39 was noted to have rusted and rotting mullions and frames.	Complete a through facility exterior door inventory and replace as necessary. Expect to replace several door sets in the next 1-10 years.	\$20,000	\$30,000	\$20,000	\$70,000
I-010	West HS	Interior - Bleachers	West HS bleachers are aging and many rows need board replacements. Managing the amount of bleachers needed in the space is time consuming and bleachers must be drug across the floor to setup large events.	Replace boards and rows as necessary. Install a single set of handrails to one of the mobile bleacher sets. Consider a wholistic bleacher reconfiguration to streamline operations as budget allows.	\$40,000	\$30,000		\$70,000
S-004	West HS	Site & Landscape	The synthetic track surface subbase is in good condition however the top layer is wearing and could use an additional layer.	Add top layer to exiting rubberized running track surface.		\$65,000		\$65,000
E-005	Wausau West	Electrical - Subpanels	Dated electrical subpanels and disconnects were noted throughout the facility.	Upgrade obsolete breaker panels and disconnects over the next 1-5 years.	\$25,000	\$35,000		\$60,000
I-014	West HS	Interior - Third Floor Finishes	Portions of third floor could use a finishes update. Wallpaper, tackboard walls, and damaged wood floor base trim were noted as well as several classroom clocks.	Update portions of third floor wall finishes and clocks.			\$50,000	\$50,000
I-013	West HS	Interior - Casework	Interior casework is generally in good condition. Science area is dated but functioning. Foods area casework is in poor condition and should be updated.	Before a large investment in science upgrades, a larger renovation project to update and open the space and construct corridors through the pods should be explored. Recommend replacing Foods casework in 1-5 years. Pricing given only for Foods area.		\$50,000		\$50,000
S-005	West HS	Site & Landscape	Currently there is only a small 20'x50' set of bleachers for football and track events at West High field. Capacity is inadequate.	Install additional prefabricated aluminum bleachers.		\$50,000		\$50,000

Wausau School District - West HS

FIM Code	Site/Bldg.	System/ Component	General Description	Recommendation	1-2 Year	3-5 Year	5-10 Year	Total 1-10 Year
E-007	West HS	Electrical - Door Access	Card Access systems across the district are in need of upgrade to their board controllers. Information was compiled through district IT interviews and recommended per school individual need.	Replace HID Vertx boards to Mercury LP1502's.	\$50,000			\$50,000
X-005	West HS	Exterior - Windows	Three large corridor windows on second floor are single-pane non-tempered windows. These windows are both inefficient and dangerous.	Replace the large single pane sections with double-pane thermally-broken tempered glass aluminum windows.	\$50,000			\$50,000
X-004	West HS	Exterior - Tuckpointing	Tuck pointing and masonry repairs needed. Stained face brick with open, missing, and deteriorating mortar.	Re-tuck walls, replace missing and damaged masonry, and professionally clean stone and bricks.			\$45,000	\$45,000
E-003	Wausau West	Electrical - Phase Protection	Loss of phase issues have plagued the district. The maintenance department has researched phase protection solutions for all facilities.	Install appropriate phase protection in West HS. Keep in mind larger electrical replacement plans described in subsequent FIM's to ensure compatibility with replacement systems.		\$40,000		\$40,000
I-002	West HS	Interior - Painting	Wear and tear was observed in several areas across the facility with minor painting needed. Photo shown from IMC.	Clean, prepare surfaces, and paint.	\$10,000	\$10,000	\$10,000	\$30,000
E-008	West HS	Electrical - Cameras	West High was identified during staff interviews as in need of more cameras.	Add additional security cameras as needed. Include wider range 180/360 degree cameras. Pricing given to add 15 cameras.	\$15,000	\$15,000		\$30,000
M-005	West HS	Plumbing - Domestic Hot Water	Of the five units reviewed during the audit, four are in the 10-12 year old range and one is new.	Expect to replace one DHW heater in the next 1-2 years, and the remaining three in the next 3-7 years.	\$5,000	\$10,000	\$5,000	\$20,000
M-001	West HS	Mechanical - Controls	Ongoing replacement of aging BAS controllers prone to frequent failure.	Budget to have spare BAS controllers on hand and replace as necessary.	\$10,000	\$10,000		\$20,000
S-009	West HS	Site & Landscape	A standing water/flooding issue occurs across from the greenhouse near door 37. The catch basin and stormwater piping appears to be undersized in this location.	Increase the size of the catch basin and stormwater piping for this location.	\$20,000			\$20,000
M-006	East HS	Mechanical - Pipe Insulation	Missing and damaged HVAC and domestic water pipe insulation was noted during the audit.	Replace and/or install damaged/missing insulation.	\$10,000	\$5,000		\$15,000
X-002	West HS	Greenhouse	The greenhouse has operational problems with automatic vents binding, which have permanently bent linkages.	Invest in the greenhouse to extend life and allow functionality. Contact manufacturer for technical support. If unable to use original mfg., hire a greenhouse expert to advise on recommended maintenance. Ensure snow plowing and melting snow is not allowed to prohibit vent opening.	\$15,000			\$15,000

Wausau School District - West HS

FIM Code	Site/Bldg.	System/ Component	General Description	Recommendation	1-2 Year	3-5 Year	5-10 Year	Total 1-10 Year
I-011	West HS	Interior - Science Life Safety	Second floor science consists of a conglomerate of pods with the interior large science storage area being landlocked with no corridor space. This space appeared to have no emergency lighting and be underserved with fire protection equipment.	Install 24-hour egress lighting in science storage and the surrounding four vestibules. Review smoke detection and alarm/strobes with a fire protection specialist. Be aggressive with monitoring and alarm given the space usage.	\$12,500			\$12,500
X-006	West HS	Exterior - Windows	Although minimal, several sets of aluminum double pane windows were found to have failing gaskets.	Perform spot window repair as needed.	\$5,000		\$5,000	\$10,000
E-009	West HS	Electrical - Availability	Portions of the third floor were noted to contain wall mounted outlets in wire mold, as well as obsolete AV and cable TV outlets. Classroom 345 was noted.	Appropriately wire gypsum walls to code and eliminate unneeded/unused/obsolete AV infrastructure.		\$10,000		\$10,000
I-012	West HS	Interior - Life Safety Storage Clutter	West was found to have excessive clutter in mechanical and electrical spaces and unorganized storage spaces. This is a life safety issue and will make all operations more efficient.	Clean, inventory, purge, organize. Purchase shelving to appropriately store materials.	\$10,000			\$10,000
S-001	West HS	Site & Landscape	Set routine asphalt maintenance schedule with area rotation.	Continue to crack clean and crack fill as needed. Every 3-5 years seal, and repaint asphalt.	\$5,500			\$5,500
S-007	West HS	Site & Landscape	Increase routine planters landscaping maintenance.	Annually or more often if needed prune, thin, and remove invasive vegetation in planters and around building perimeters, fencing, hardscape surface edges, utility supply areas.	\$5,000			\$5,000
S-006	West HS	Site & Landscape	Mulch washing out on to walks.	Annually, or more often if needed, refresh and retain mulch to an elevation lower than border, walk, or turf. Consider crushed gravel in lieu of mulch planters along walks and buildings.	\$3,500			\$3,500
Total					\$1,291,500.00	\$2,775,000.00	\$6,395,000.00	\$10,461,500.00